Transportation Emergency Communications and Homeland Security

By K. Craig Allred, Coordinator, ITS Public Safety Program, ITS Joint Program Office, U.S. Department of Transportation and Jeff Michael, Chief, EMS Division, National Highway Transportation Safety Administration, U.S. Department of Transportation

The traditional link among transportation, 9-1-1, and emergency services is the traffic crash. This link is as strong as ever. Traffic crashes are still the single leading cause of death for young Americans. And 9-1-1 is still the essential first link in the chain of survival.

However, there's now another link that's just as urgent: national security and our war against terrorism. Never before has there been such a need for quick and positive emergency access. President Bush is calling for neighborhood watch programs. And these programs can only be effective if there is a reliable emergency access system in place.

Emergency communications is at a crossroads. Our 9-1-1 system is facing the greatest challenge it has ever confronted-moving from one technology infrastructure to another: wireline to wireless. And our nation is facing a security imperative-that of building a national communications system that can protect against future acts of terrorism. The challenge is formidable, but our 9-1-1 system has never had a better opportunity to serve the nation.

For the past 30 years, emergency medical services have relied on the U.S. Department of Transportation (USDOT) for national leadership. Through the National Highway Transportation Safety Administration (NHTSA). USDOT leads development of national consensus standards (the National Standard Curricula) for emergency medial technicians, for emergency vehicle operators, for medical directors, and even for emergency medical dispatchers.

USDOT also has a long history in 9-1-1. We were right there with you in the late 1960s when the first 9-1-1 call was made. In 1969, we included a recommendation for a universal emergency number in our State Highway Safety funding policies. In 1973, we got a little more specific, requiring that the universal emergency number should be 9-1-1. And by 1978, we were providing model legislation to help states build their 9-1-1systems.

In recent years, NHTSA and the USDOT's Intelligent Transportation Systems (ITS) Pub-

lic Safety Program have worked with the National Emergency Number Association (NENA) and other partners in the public safety community to support implementation of wireless E9-1-1. Secretary of Transportation Norman Mineta recognizes the lifesaving benefit that wireless E9-1-1 can offer to crash victims, especially those in a rural single vehicle erash that might otherwise be undiscovered for critical minutes or hours. The Secretary also recognizes the importance of wireless E9-1-1 implementation for national security. In early April 2002, the Secretary met with a group of 9-1-1 stakeholders and announced his Secretary's Initiative for Wireless E9-1-1. The Secretary's initiative also includes a large technical assistance effort being led by NENA and the Association of Public-Safety Communications Officials, International (APCO). The DOT is providing funding for NENA and APCO to develop a range of tools and services, including educational packages to keep 9-1-1 centers apprised of national trends.

NENA has been central in the planning of the Secretary's Initiative and will need to be central in its implementation as well. Specifically, the Action Plan calls for NENA to take the lead on:

- monitoring deployment of wireless E9-1-1 across the nation;
- developing model plans for local implementation;
- educating 9-1-1 centers about wireless E9-1-1 implementation needs and strategies:
- assisting with the creation of local cost-recovery agreements by conducting national cost analyses. creating guidelines, and sharing success stories.

The Secretary has asked NENA to help with an advanced technology roundtable that USDOT will host in the fall of 2002. We want to build on the NENA Future Path Plan to ensure that we are looking far enough ahead and considering all the technological options as we design the next generation 9-1-1 system. This roundtable will bring together a group of 9-1-1 technical experts with a similar group from other high-tech fields, such as Silicon Valley firms, to look at opportunities for making evolutionary changes that could make 9-1-1 even more effective or more affordable.

We also see the potential of the wireless E9-1-1 infrastructure for carrying advanced crash notification data. Systems like GM OnStar® can be enhanced in the future so, in addition to crash notification, they can carry information about the medical condition of the victim. This will allow emergency physicians to prepare for the arrival of victims needing specialized care.

These technologies can improve emergency response by providing incident location, passenger medical histories, and crash impact information not otherwise available. However, the same technologies might create a burden for 9-1-1 calltakers and dispatchers if they require the calltakers and dispatchers to handle more information than needed. Worse, they could delay emergency response if their input to the 9-1-1 center is delivered through a non-priority line.

The dispatch and EMS communities must be involved long before technology is introduced to the marketplace, in order to assure its seamless integration into the existing 9-1-1 and emergency response system. A new report to be released this fall, entitled An EMS Perspective on Future Development of ITS Technologies, written by the medical subcommittee of ITS America's Public Safety Advisory Group (PSAG), will be a first step toward earlier involvement of the emergency response

community in ITS technology development.

The emergency response community is already engaged in early planning of DOT and ITS activities. ITS America's PSAG provides a unique forum for discussion of issues of cross-cutting concern to the transportation and public safety communities and for input into DOT and ITS programs. It includes representatives of the transportation, EMS, emergency communications, law enforcement, fire and rescue, and towing and recovery communities. NENA representatives are active in the PSAG and have been instrumental in key PSAG activities, such as the development of the medical subcommittee's report.

We at USDOT urge NENA members to make rapid implementation of wireless E9-1-1 a high priority in the coming year, so that we can get this important job accomplished and move on to other issues, including the application of new ITS technologies to emergency medicine. We are proud of our long history of partnership with the 9-1-1 and emergency response communities and are actively working to strengthen this partnership in coming years. in order to build the emergency communications network that America deserves.

For more information, see www.its.dot.gov. Click on "Public Safety." NN

